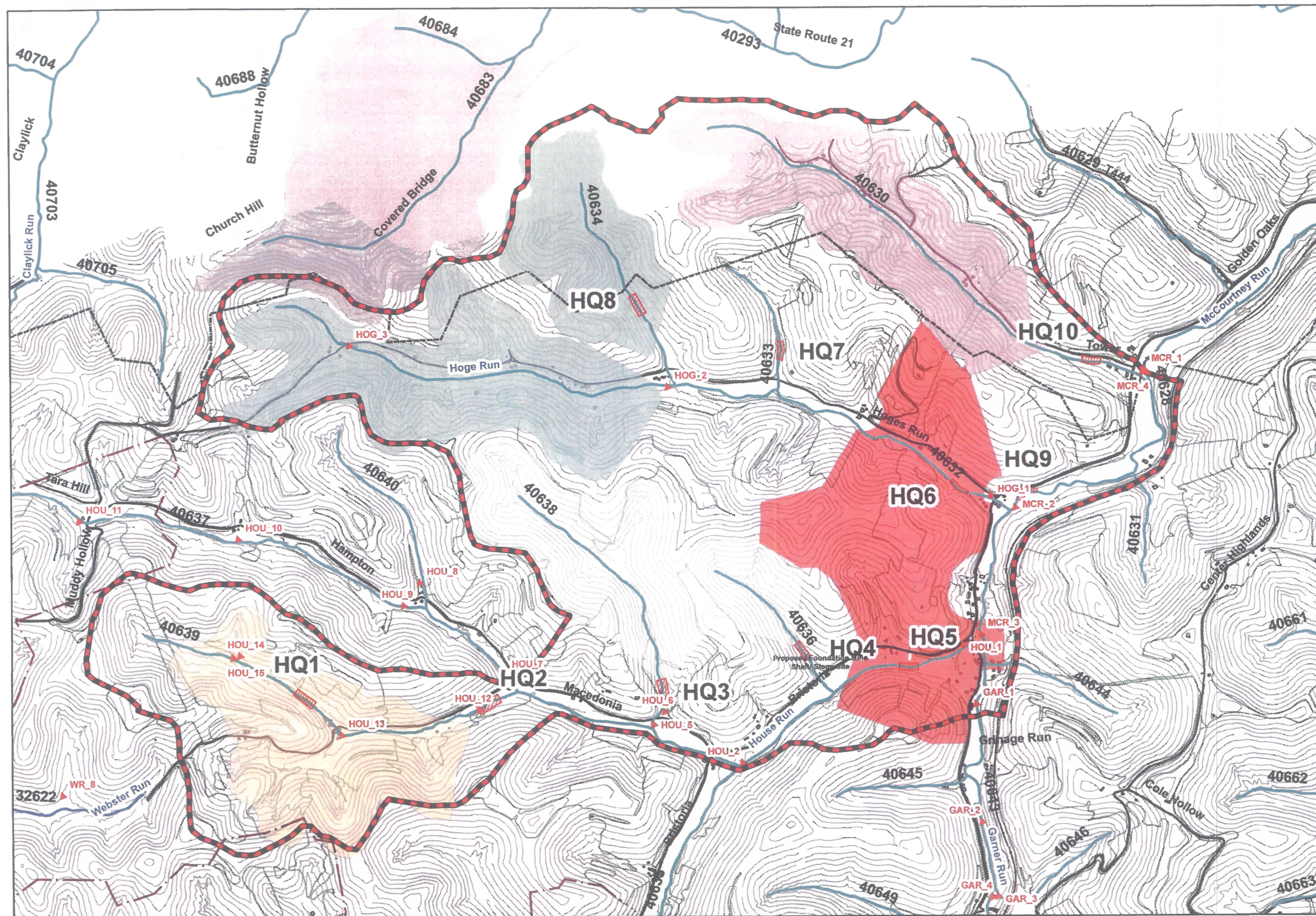




Foundation Mine HQ Watershed Study

Legend

- 300' Sampling Area
 - Proposed Study Area
 - Shaft/ Slope Permit Boundary
 - Boundary CNG
 - Cumberland Permit Boundary
 - Emerald Permit Boundary
 - Sewickley Boundary
 - Cumberland West Current Boundary
 - Underground Permit Boundary
 - Green Manor Reserve
- Foundation Mine Preferred Refuse Areas**
- Alternate 1-R1
 - Alternate 2-R3 & R5
 - Alternate 3-R4
 - Alternate 4-R6
 - Alternate 5-R21
 - Alternate 6-R11
- CWF(COLD WATER FISHES)
 - EV(EXCEPTIONAL VALUE)
 - HQ(HIGH QUALITY)
 - HQ-CWF(HIGH QUALITY-COLD WATER FISHES)
 - HQ-TSF(HIGH QUALITY-TROUT STOCKING)
 - HQ-WWF(HIGH QUALITY-WARM WATER FISHES)
 - Missing from Chapter 93
 - TSF(TROUT STOCKING)
 - WWF(WARM WATER FISHES)

Project Area: 2,530 Acres

Stream Miles within
Project Area: 10.90 Miles

Source:
Pennsylvania Department of Environmental Protection (EMap)
Oct 26, 2007
Existing Use Streams
Chapter 93 Reference: Commonwealth of Pennsylvania, 2003,
Pennsylvania Code, Title 25 Environmental Protection,
Department of Environmental Protection, Chapter 93,
Water Quality Standards, Harrisburg, PA

Projection:
State Plane NAD1983
Pennsylvania South Feet

SOUTH FORK TEN MILE CREEK
HIGH QUALITY STREAM SAMPLING MAP



Foundation Mining, LP
PO Box 1020
Waynesburg, PA 15370

Macroinvertebrate Data Collected from Appendix B Sampling
Stations located on Garner Run Foundation Mine in Jackson
Township, PA. Spring 2007 Round 1

Taxa Order	Pollution Tolerance Value	Functional Feeding Group	Garner Run	GAR 1
Ephemeroptera				
Siphonoridae	7	SC		1
Heptageniidae	3	SC		1
<i>Stenonema</i>	3	SC		3
<i>Epeorus</i>	0	SC		6
Ephemerellidae				
<i>Ephemerella</i>	1	GC		1
<i>Eurylophella</i>	4	GC		6
Caenidae				
<i>Caenis</i>	7	GC		5
Plecoptera				
Perlodidae	2	PR		2
<i>Isoperla</i>	2	PR		5
<i>Amphinemura</i>	3	SH		4
<i>Prostoia</i>	2	SH		
Leuctridae				
<i>Leuctra</i>	0	SH		1
Perlidae				
<i>Acroneuria</i>	0	PR		1
Trichoptera				
Limnephilidae				
<i>Pycnopsyche</i>	4	SH		3
Hydropsychidae	5	FC		10
<i>Cheumatopsyche</i>	6	FC		5
Rhyacophilidae				
<i>Rhyacophila</i>	1	PR		1
Coleoptera				
Elmidae				
<i>Stenelmis</i>	5	SC		42
Psephenidae				
<i>Psephenus</i>	4	SC		6
Diptera				
Chironomidae	6	GC		42
Ceratopogonidae	6	PR		1
Simuliidae				
<i>Simulium</i>	6	FC		5
Tipulidae				
<i>Antocha</i>	3	GC		2
<i>Tipula</i>	4	SH		2
<i>Hexatoma</i>	2	PR		2
Tabanidae				
<i>Chrysops</i>	7	PR		1
Stratiomyidae				
<i>Stratiomyia</i>	8	GC		1
Empididae				
<i>Hemerodromia</i>	6	PR		6
Bivalva				
Sphaeriidae	8	SC		1
Crustacea				
Cambaridae	6	GC		1
Annelida				
Oligochaeta	10	GC		2
Average Pollution Tolerance Value	4.23		Total Individuals	169
			Species Diversity	30
			Average Pollution Tolerance Value	4.4

Macroinvertebrate Data Collected From Appendix B Sampling Stations Located on House Run; Foundation Mine in Center Township, PA. Spring 2007 Round 1												
Taxa Order	Pollution Tolerance Value	Functional Feeding Group	House Run	HOU 1	HOU 2	HOU 5	HOU 6	HOU 12	HOU 13	HOU 14	HOU 15	
Ephemeroptera												
Leptophlebiidae	4	GC				1				2		
Basellidae												
Baetis	6	GC									4	
Siphonuridae												
Amelitus	0	GC								38		
Heptageniidae	3	SC		2					5			
Stenonema	3	SC		5	7	14	4		4		1	
Epeorus	0	SC		1	1							
Heptagenia	4	SC		6								
Ephemerellidae	2	GC										
Ephemerella	1	GC		3	4	28					10	
Eurylophella	4	GC										
Ephemeridae	2	GC							1			
Plecoptera												
Capniidae												
Allocapnia	3	SH									4	
Capnia	1	SH										
Perlidae	2	PR										
Isoperla	2	PR	7	6	14	10	5	24	39	17		
Diploperla	2	PR		5	2	6	3	4	1			
Cloperla	2	PR				2		2				
Chloroperlidae												
Swalia	0	PR		2								
Swalia	0	PR		1		1		3				
Nemouridae												
Amphimerura	3	SH	2	2	3	26	2				47	
Nemoura	1	SH								15		
Leuctridae	0	SH		1								
Leuctra	0	SH	1		6		1	8		3		
Zelandra	0	SH										
Trichoptera												
Calamoceratidae												
Heterodecton	5	SH									1	
Phryganeidae	7	SH						2				
Agrypnia												
Philopotamidae	4	FC	1					2				
Chimarra												
Polycentropodidae	8	FC		1						1		
Cynellus	7	FC										
Neureclipsis	5	PR		2								
Polycentropus	5	PR										
Limnephilidae												
Goera	0	SC								2		
Apatania	3	SC								1		
Pycnopsycha	4	SH								2	1	
Pseudostenophylax	0	SH						7	2			
Isonychia	3	SH								4		
Hydropsychidae												
Hydropsyche	5	FC			2	1	4			3		
Macrostentum	3	FC										
Potamya	5	FC		1	2		6					
Cheumatopsyche	6	FC	1									
Dipterona	0	FC								1	4	
Rhyacophiliidae												
Rhyacophila	1	PR	3		2	4	4					
Lepidostomatidae												
Thraulopsycha	1	SH			1							
Uenoidae						2		14				
Coleoptera												
Elmidae												
Stenelmis	5	SC	25	7	2			22	7		1	
Optoservus	4	SC				6						
Oulimnius	4	SC						1				
Hydrophilidae										2		
Hydrochus	5	SH										
Psephenidae												
Psephenus	4	SC	2									
Diptera												
Chironomidae	6	GC	38	17	5	3	37	10	25	28		
Ceratopogonidae												
Baetis	6	GC	3							2		
Simuliidae												
Simulium	6	FC	1	1			5	1				
Tipulidae	4	SH										
Limnophila	3	PR		1		5		17		1		
Antocha	3	GC										
Tipula	4	SH		2	4	10		4				
Hexatoma	2	PR	3	3	3	1		1	1		1	
Pseudolimnophila	2	PR			3							
Holotrusa	N/A	N/A				1						
Molophilus	4	SH		2								
Tabanidae												
Tabanus	5	PR		1				2		5		
Stratiomyidae												
Stratiomys	5	GC						1				
Antherix	2	PR						1				
Empididae												
Hemerodromia	6	PR	5	17								
Megoptera												
Corydalidae												
Nigronia	2	PR			1	1						
Blepharidopterus												
Sphaeriidae	8	SC		1		2		1				
Gastropoda												
Physidae	8	SC		1								
Lymnaeidae	7	SC		1	1		2	1				
Cnidaria (Crayfish)												
Cambardia	6	GC				1	4	4	2	1		
Amphibia												
Oligochaeta	10	GC		2	2	2		3	3			
Hemichordata												
Corbicula	8	PR								1		
Odonata												
Aeschna												
Aeschna	5	PR			1							
Average Pollution Tolerance Value			3.56									
Total Individuals			102	83	58	131	129	122	160	133		
Diversity Average			16	24	19	26	16	27	19	17		
Pollution Tolerance Value			3.5	4.1	3.7	3.2	3.9	3.6	3.7	3.5		

Macroinvertebrate Data Collected from Appendix B Sampling
Stations Located on Garner Run; Foundation Mine, Jackson
Township, Greene County PA. Round 2

Taxa Order	Pollution Tolerance Value	Functional Feeding Group	Garner Run	GAR 1
Ephemeroptera				
Caenidae				
Caenis	7	GC		1
Plecoptera				
Leuctridae				
Leuctra	0	SH		1
Perlidae	1	PR		
Acroneuria	0	PR		8
Perlesta	4	PR		40
Ecoptura	2	PR		1
Trichoptera				
Hydropsychidae	5	FC		
Potamyia	5	FC		57
Coleoptera				
Elmidae				
Stenelmis	5	SC		32
Optioservus	4	SC		9
Psephenidae				
Psephenus	4	SC		7
Diptera				
Chironomidae	6	GC		20
Hexatoma	2	PR		5
Bivalva				
Corbiculidae	5	SC		3
Odonata				
Gomphus	5	PR		2
Average Pollution Tolerance Value	3.67		Total Individuals	186
			Species Diversity	13
			Average Pollution Tolerance Value	3.7

Macroinvertebrate Data Collected from Appendix B Sampling Stations Located on House Run; Foundation Mine, Jackson Township, Greene County PA, Round 2

Taxa Order		Functional Feeding Group	Pollution Tolerance Value		House Run	HOU														
			1	2		3	4	5	6	7	8	9	10	11	12	13	14	15		
Ephemeroptera																				
Leptophlebiidae	Leptophlebia	4	GC																	
Baetidae	Baetis	4	GC	2														1		
Siphonuridae	Siphonurus	6	GC																	
Heptageniidae	Heptagenia	7	GC	8	1					32								16		
Heptageniidae	Heptagenia	3	SC													3		13		
Heptageniidae	Heptagenia	3	SC																	
Ephemeridae	Epeorus	0	SC	3	2					9								1		
Ephemeridae	Hexagenia	6	GC																	
Ephemerellidae	Ephemerella	1	GC																	
Eurylophella	Eurylophella	4	SC																	
Caenidae	Caenis	7	GC	8	1	5	8	28												
Plecoptera																				
Capniidae	Allocaenia																			
Perlotidae	Isoperla	3	SH																	
Perlotidae	Isoperla	2	PR	26	6					1						1	2	5		
Perlotidae	Diploperla	2	PR																	
Perlotidae	Remenis	2	PR	2																
Nemouridae	Amphinemura	3	SH	1																
Leuctridae	Zeleuctra	0	SH																	
Perlidae	Perlidae	3	PR																	
Perlidae	Perlidae	3	PR																	
Perlidae	Perlidae	0	PR																	
Perlidae	Perlidae	2	PR																	
Perlidae	Perlidae	4	PR																	
Trichoptera																				
Philopotamidae	Chimarra	4	FC																	
Limnephilidae	Limnephila																			
Limnephilidae	Limnephila	0	SC																	
Limnephilidae	Limnephila	3	PR																	
Limnephilidae	Limnephila	3	PR																	
Limnephilidae	Limnephila	0	PR																	
Limnephilidae	Limnephila	2	PR																	
Limnephilidae	Limnephila	0	PR																	
Limnephilidae	Limnephila	1	SH																	
Limnephilidae	Limnephila	0	SC																	
Limnephilidae	Limnephila	0	SC																	
Coleoptera																				
Elmidae	Stenelmis	5	SC	23	26	11	16	38												
Elmidae	Stenelmis	2	GC	16			2													
Elmidae	Stenelmis	4	SC																	
Elmidae	Stenelmis	2	OM	5																
Elmidae	Stenelmis	6	GC		3		1	7												
Elmidae	Stenelmis	5	SC					2												
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5	PR																	
Elmidae	Stenelmis	5																		

Macroinvertebrate Data Collected from Appendix B Sampling Stations Located on House Run, Foundation Mine; Greene County, PA (Fall 2007).

Taxa Order	Pollution Tolerance Value	Functional Feeding Group	House Run	HOU 1	HOU 2	HOU 5	HOU 6	HOU 12	HOU 13	HOU 14	HOU 15
Ephemeroptera (mayflies)											
Leptophlebiidae	4	GC			1					4	2
Leptophlebia	4	GC							13	5	
Ameletidae	0	GC									
Ameletus	0	GC				1					
Heptageniidae	3	SC				1					
Stenonema	3	SC					5				
Stenacron	4	SC							1		
Maccaffertium	3	SC		1	1	4					1
Ephemerellidae	2	GC								2	
Eurylophella	4	GC					1		4		1
Ephemeridae	4	GC									
Ephemerella	2	GC					1				
Plecoptera (stoneflies)											
Capniidae	3	SH							5	1	2
Perlidae	2	PR					1				
Isoperla	2	PR							1		
Diploperla	2	PR									1
Diura	2	PR									1
Chloroperiidae	0	PR									
Swellsa	0	PR							1		2
Nemouridae	0	SH									
Soyedina	2	SH							2		5
Leuctridae	0	SH									2
Trichoptera (caddisflies)											
Philopotamidae	3	FC									
Chimarra	4	FC							8		
Limnephilidae	4	SH									
Goera	0	SC								1	
Pycnopsyche	4	SH									1
Madeophylax	4	SH								1	2
Goeridae	N/A	N/A									
Goera	0	SC				1	8				3
Hydropsychidae	5	FC				2			8		3
Macrostemum	3	FC								1	
Cheumatopsyche	6	FC				22	3		5		
Diplectrona	0	FC					2	36	1		7
Rhyacophilidae	1	PR									
Rhyacophila	1	PR						1			
Diptera (true flies)											
Chironomidae	6	GC		3		12	22	1	95	2	15
Ceratopogonidae	6	PR					1				5
Tipulidae	4	SH				4	5	2	11	4	11
Pedicia	6	PR					2	1			3
Tabanidae	6	PR						1			
Coleoptera (beetles)											
Elmidae	5	GC									
Stenelmis	5	SC					1	4			
Optioservus	4	SC				5	2	1	3		2
Macronychus	2	OM						6			
Dubiraphia	6	GC						2			
Hydrophilidae	5	PR									1
Psephenidae	4	SC									
Psephenus	4	SC						1	1		
Ectopria	5	SC							1		
Bivalva (clams)											
Sphaeriidae	8	FC		1				1			1
Annelida (aquatic worms)											
Oligochaeta	10	GC			4		13	2	2		4
Odonota											
Calopterygidae	5	PR									
Calopteryx	6	PR							1		
Collembola (springtail)											
Poduridae	9	GC									
Podura	9	GC									2
Average Pollution Tolerance Value	3.56		Total Individuals	5	6	62	67	58	164	21	77
			Species Diversity Average Pollution Tolerance Value	3	3	9	14	12	19	9	23
				5.67	5.67	3.44	4.14	4.67	4.16	3.33	3.96

Macroinvertebrate Data Collected from Appendix B Sampling Stations
Located on Garner Run, Foundation Mine; Greene County, PA. (Spring
2008)

Taxa Order	Pollution Tolerance Value	Functional Feeding Group		GAR 1	
Ephemeroptera (mayflies)					
Heptageniidae	3	SC		1	
<i>Maccaffertium</i>	3	SC		1	
Ephemereilidae	2	GC			
<i>Eurylophella</i>	4	GC		10	
Caenidae	7	GC			
<i>Caenis</i>	7	GC		8	
Plecoptera (stoneflies)					
Perlodidae	2	PR			
<i>Isoperla</i>	2	PR		5	
Chloroperlidae	0	PR			
<i>Sweltsa</i>	0	PR		1	
Nemouridae	0	SH			
<i>Amphinemura</i>	3	SH		1	
Leuctridae	0	SH			
<i>Leuctra</i>	0	SH		1	
Trichoptera (caddisflies)					
Hydropsychidae	5	FC			
<i>Cheumatopsyche</i>	6	FC		3	
Diptera (true flies)					
Chironomidae	6	GC		88	
Simuliidae	6	FC		2	
Empididae	6	PR		1	
Coleoptera (beetles)					
Elmidae	5	GC			
<i>Stenelmis</i>	5	SC		6	
<i>Dubiraphia</i>	6	GC		1	
Psephenidae	4	SC			
<i>Psephenus</i>	4	SC		2	
Bivalva (clams)					
Sphaeriidae	8	FC		2	
Corbiculidae	4	FC		4	
Crustacea (crayfish)					
Cambaridae	6	GC		1	
Annelida					
Oligochaeta	10	GC		1	
Odonota					
Aeshnidae	3	PR			
<i>Boyeria</i>	2	PR		1	
Average Pollution Tolerance Value	3.97		Total Individuals	140	
				Species Diversity	20
				Average Pollution Tolerance Value	4.55

Macroinvertebrate Data Collected from Appendix B Sampling Stations Located on House Run, Foundation Mine, Greene County, PA (Spring 2008).

Taxa Order	Pollution Tolerance Value	Functional Feeding Group	HOU 1	HOU 2	HOU 5	HOU 6	HOU 12	HOU 13	HOU 14	HOU 15
Ephemeroptera (mayflies)										
Leptophlebiidae	4	GC								
Baetidae	6	GC				7		2		
						2				
Ameletidae	0	GC								
Ameletus	0	GC			3			3	1	2
Heptageniidae	3	SC								
Maccaffertium	3	SC	1		2	3	2			
Stenacron	4	SC	3		1			1		
Epeorus	0	SC			2			1		4
Ephemerellidae	2	GC								
Ephemerella	1	GC	1		4			1		3
Eurylophella	4	GC	4				1	1		4
Ephemeridae	4	GC								
	2	GC	2							
Plecoptera (stoneflies)										
Perlidae	2	PR								
				6			2		5	
Isoperla	2	PR	1	11	13	12	15	53	14	7
Diploperla	2	PR					1	1	2	1
Chloroperlidae	0	PR			4					
Sweltsa	0	PR						1	1	
Nemouridae	0	SH								
Amphinemura	3	SH		11	9	45	62	3	1	2
Leuctridae	0	SH								
	0	SH						2		
Trichoptera (caddisflies)										
Philopotamidae	3	FC								
Chimarra	4	FC						2		
Limnephiliidae	4	SH							1	
Anabolia	5	SH								1
Pycnopsycha	4	SH								2
Isonychia	3	SH								
Hydropsychidae	5	FC								
Cheumatopsyche	6	FC				3	24	4		
Diplectrona	0	FC								3
Rhyacophiliidae	1	PR								
Rhyacophila	1	PR					3	1		2
Uenoidae	3	SC								
			1			2	11	1	1	7
Neophylax	3	SC								
Diptera (true flies)										
Chironomidae	6	GC	34	32	28	83	11	61	22	8
Ceratopogonidae	6	PR							2	
Simuliidae	6	FC				25	2	1		
Tipulidae	4	SH		2	7		2	15	2	13
Tabanidae	6	PR						1	1	2
Coleoptera (beetles)										
Elmidae	5	GC								
Stenelmis	5	SC	2	2		5	16	10		
Optioservus	4	SC			1		3	1		1
Dubiraphia	6	GC	3							
Psephenidae	4	SC								
Psephenus	4	SC	2					1		
Ectopria	5	SC						1		
Bivalva (clams)										
Sphaeriidae	8	FC							1	
Crustacea (crayfish)										
Gammaridae	6	GC								
Cambaridae	6	GC					1	1		
Annelida										
Oligochaeta	10	GC			1			3	1	2
Average Pollution Tolerance Value	3.48		54	64	75	187	156	172	55	64
		Total Individuals								
		Species Diversity	11	6	12	10	15	25	14	17
		Average Pollution Tolerance Value	3.64	3.67	3.08	4.60	3.80	3.68	4.07	3.12

Macroinvertebrate Data Collected from Appendix B Sampling Stations Located on McCourtney Run, Foundation Mine; Greene County, PA (Spring 2008).

Taxa Order	Pollution Tolerance Value	Functional Feeding Group		MCR 2	MCR 3	MCR 4
Ephemeroptera (mayflies)						
Baetidae	6	GC			1	
Heptageniidae	3	SC				
Maccaffertium	3	SC			1	6
Stenonema	3	SC			2	
Ephemerellidae	2	GC				
Ephemerella	1	GC			1	
Eurylophella	4	GC				5
Caenidae	7	GC				
Caenis	7	GC			4	
Plecoptera (stoneflies)						
Perlodidae	2	PR			1	1
Isoperla	2	PR		3	2	6
Chloroperlidae	0	PR				
Suwallia	0	PR				2
Sweltsa	0	PR			1	
Leuctridae	0	SH				
Leuctra	0	SH				1
Trichoptera (caddisflies)						
Hydropsychidae	5	FC				
Cheumatopsyche	6	FC			2	3
Diptera (true flies)						
Chironomidae	6	GC		5	55	31
Simuliidae	6	FC				2
Tipulidae	4	SH				3
Empididae	6	PR			1	
Coleoptera (beetles)						
Elmidae	5	GC				
Stenelmis	5	SC			9	37
Optioservus	4	SC			2	4
Psephenidae	4	SC				
Psephenus	4	SC				5
Gastropoda (snails)						
Physidae	8	SC		1		
Average Pollution Tolerance Value	3.68		Total Individuals	9	82	106
				Species Diversity Average	3	13
				Pollution Tolerance Value	5.33	3.54

Fish community composition, structure, tolerance, and trophic guilds of sampling points sampled by backpack electrofishing (BPEF), Southfork High Quality Sampling Area, Waynesburg, Pennsylvania (June-August 2007)

	GAR 1		HOG 1		HOG 2		HOG 3		HOU 1		HOU 2		HOU 5		HOU 6		HOU 12		HOU 13		HOU 14		HOU 15		MCR 2		MCR 3		MCR 4		Tolerance Designation (relevant to non-specific stressors)	Trophic Guilds	
	# organisms	Rel. Abundance	# organisms	Rel. Abundance	# organisms	Rel. Abundance	# organisms	Rel. Abundance	# organisms	Rel. Abundance	# organisms	Rel. Abundance	# organisms	Rel. Abundance	# organisms	Rel. Abundance	# organisms	Rel. Abundance	# organisms	Rel. Abundance	# organisms	Rel. Abundance	# organisms	Rel. Abundance	# organisms	Rel. Abundance	# organisms	Rel. Abundance					
Northern Hog Sucker (<i>Hypentelium nigricans</i>)	1	0.01																							8	0.04	1	0.01			Intolerant	Insectivore	
White Sucker (<i>Catostomus commersoni</i>)	30	0.24	18	0.15	3	0.04			11	0.12	17	0.21	6	0.09			9	0.16							39	0.18	19	0.21			Tolerant	Omnivore	
Black Redhorse (<i>Moxostoma duquesnei</i>)																											1	0.01			Intolerant	Insectivore	
Golden Redhorse (<i>Moxostoma erythrurum</i>)																									1	0.00					Intermediate	Insectivore	
Creek Chub (<i>Semotilus atromaculatus</i>)	9	0.07	33	0.28	30	0.43	5	1.00	15	0.16	9	0.11	13	0.20			13	0.24	20	0.80					12	0.05	4	0.04			Tolerant	Generalist Feeders	
Central Stoneroller Minnow (<i>Campostoma anomalum</i>)	12	0.10	30	0.25	2	0.03			30	0.32	7	0.09	16	0.25			9	0.16							14	0.06	27	0.29			Intermediate	Herbivore	
Bluntnose Minnow (<i>Pimephales notatus</i>)	33	0.26	3	0.03	2	0.03			15	0.16	22	0.28	7	0.11			10	0.18							96	0.44	8	0.09			Tolerant	Omnivore	
Silverjaw Minnow (<i>Ericymba buccata</i>)	6	0.05	8	0.07					10	0.11	1	0.01	2	0.03			1	0.02							3	0.01	3	0.03			Intermediate	Insectivore	
Common Shiner (<i>Luxilus cornutus</i>)	16	0.13							2	0.02			1	0.02											2	0.01	8	0.09			Intermediate	Insectivore	
Blacknose Dace (<i>Rhinichthys atratulus</i>)			18	0.15	15	0.22			1	0.01	8	0.10	2	0.03			5	0.09	2	0.08							3	0.03			Tolerant	Generalist Feeders	
Longnose Dace (<i>Rhinichthys cataractae</i>)					8	0.12					3	0.04					7	0.13	3	0.12											Tolerant	Generalist Feeders	
Redside Dace (<i>Clinostomus elongatus</i>)			1	0.01	9	0.13																										Tolerant	Generalist Feeders
Striped Shiner (<i>Luxilus chrysocephalus</i>)	3	0.02							1	0.01																	3	0.03			Intermediate	Insectivore	
Rosyface Shiner (<i>Notropis rubellus</i>)															No Data Collected						No Data Collected	No Data Collected			3	0.01			No Data Collected		Intolerant	Insectivore	
Yellow Bullhead (<i>Ameiurus natalis</i>)			1	0.01																							1	0.01			Tolerant	Insectivore	
Brown Bullhead (<i>Ameiurus nebulosus</i>)																									1	0.00					Tolerant	Insectivore	
Smallmouth Bass (<i>Micropterus dolomieu</i>)																											7	0.08			Intermediate	Piscivore	
Fathead Minnow (<i>Pimephales promelas</i>)																																Tolerant	Omnivore
Bluegill (<i>Lepomis macrochirus</i>)	1	0.01																														Intermediate	Insectivore
Pumpkinseed Sunfish (<i>Lepomis gibbosus</i>)	5	0.04									1	0.01	2	0.03											4	0.02	3	0.03			Intermediate	Insectivore	
Johnny Darter (<i>Etheostoma nigrum</i>)			1	0.01					1	0.01	6	0.08	3	0.05											15	0.07	2	0.02			Intermediate	Insectivore	
Rainbow Darter (<i>Etheostoma caeruleum</i>)	2	0.02	2	0.02					5	0.05	2	0.03													7	0.03		0.00			Intermediate	Insectivore	
Fantail Darter (<i>Etheostoma flabellare</i>)	2	0.02	5	0.04					4	0.04	4	0.05	12	0.19			1	0.02														Intermediate	Insectivore
Greenside Darter (<i>Etheostoma blennioides</i>)																									4	0.02					Intermediate	Insectivore	
Smallmouth Bass (<i>Micropterus dolomieu</i>)	4	0.03																							9	0.04					Intermediate	Piscivore	
Rock Bass (<i>Ambloplites rupestris</i>)	1	0.01																							1	0.00	1	0.01			Intermediate	Piscivore	
Logperch (<i>Percina caprodes</i>)																											1	0.01			Intermediate	Insectivore	
Total Catch	125		120		69		5		95		80		64				55		25						219		92						



LEGEND

--- PROPOSED UNDERGROUND PERMIT
BOUNDARY

PROPOSED SURFACE MINING ACTIVITY
SLOPE SITE

PROPOSED SURFACE MINING
ACTIVITY SHAFT SITE

NORTH

PA STATE PLANE COORDINATES
NAD 27 DATUM

2000 0 2000 4000
SCALE IN FEET

REFERENCES:

WIND RIDGE, ROGERSVILLE, HOLBROOK AND NEW FREEPORT
7.5 MINUTE U.S.G.S. QUADRANGLES

**LOCATION MAP
UNDERGROUND PERMIT AREA
FOUNDATION MINE
CENTER AND JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA**

PREPARED FOR
**FOUNDATION MINING, LP
WAYNESBURG, PENNSYLVANIA**

APPROVED *RSJ 5/9/08*
CHECKED
DRAWN DEB 05/08/08
DRAWING NUMBER
FOUNDATION PWS



Penn E&R
Environmental & Remediation, Inc.